

Educational Attainment: Ohio by the Numbers



Statewide Summary of Educational Attainment

- 55.0 percent of the Ohio population continued their education beyond high school. 28.9 percent of the Ohio population over 24 years old either did not finish college or earned an associate's degree. The rest graduated with a bachelor's degree or earned an even more advanced degree.
- 34.1 percent of the 2015 Ohio population over 24 years old were high school graduates who did not further their education. 10.9 percent had dropped out before graduating from high school. In 2014, 34.5 percent of those over age 24 had graduated from high school, while 11.2 percent had not finished.

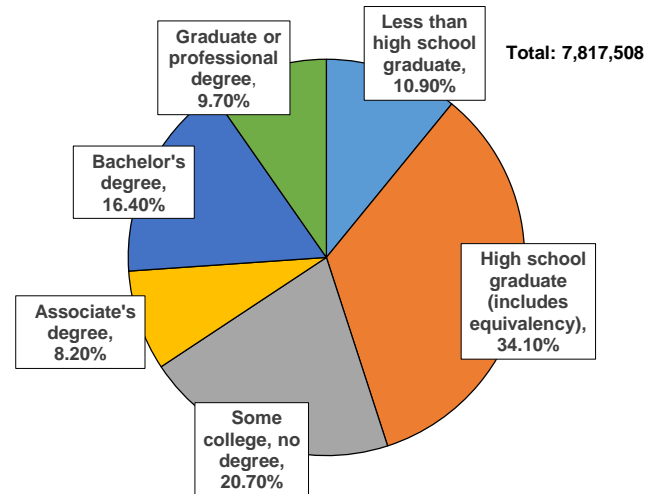
Ohio's Educational Attainment Standing

- 26.1 percent of Ohio's 2015 population had earned a bachelor's degree or higher. The United States' average was 29.7 percent. The percentage of Ohio's population with a high school degree was greater than the 2015 national average of 27.8 percent. By contrast, the state's share of the population who have some college education, but did not graduate (20.7 percent) was lower than the national average of 21.1 percent.
- 55.0 percent of people in Ohio in that age 25 and over had some college experience, an associate's degree, a bachelor's degree or an advanced degree. One year previously, 54.3 percent of the population age 25 and over had some level of education beyond high school.

Current Enrollment in Ohio Schools

- Nearly 3 million Ohioans were enrolled in some level of school in 2015. 66 percent were students enrolled in some level of education between Kindergarten and 12th grade. Most of these students attended public schools. According to the Census Bureau, 86.9 percent of K-12 students were enrolled in public schools, while 13.1 percent attended private schools.
- 27.89 percent of those who attend school in Ohio are enrolled in an undergraduate program or a more advanced program, like a professional school. Public school attendees accounted for 67.2 percent of Ohio's graduate or professional school students. This compares to 77.2 percent of Ohio's undergraduate students.

Educational Attainment in Ohio (Population age 25 and over)



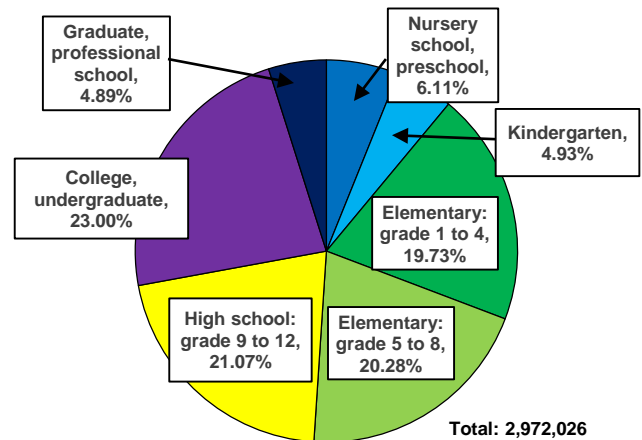
Source: U.S. Census Bureau, 2011-2015 5-yr ACS

Comparing Ohio's Educational Attainment Percentages (Population age 25 and over)

Educational Attainment	Ohio Avg.	U.S. Avg.
Less than high school graduate	10.90%	13.30%
High school graduate	34.10%	27.80%
Some college, no degree	20.70%	21.10%
Associate's degree	8.20%	8.10%
Bachelor's degree	16.40%	18.50%
Graduate or professional degree	9.70%	11.20%

Source: U.S. Census Bureau, 2011-2015 5-yr ACS

Ohio Population Enrolled in Schools (Population age 3 and over)



Source: U.S. Census Bureau, 2011-2015 5-yr ACS

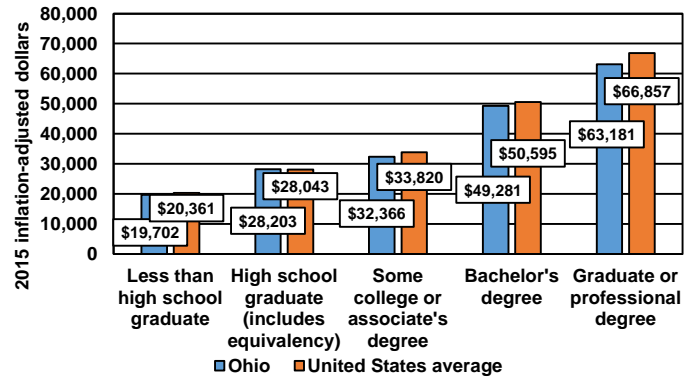
Educational Attainment: Income and Education



Relationship Between Education and Earnings

- Data collected from the U.S. Census Bureau showed a positive correlation between educational attainment and annual earnings. In 2015, the median annual income for Ohioans who had not finished high school was \$19,702. Median income increased with every new level of educational attainment. The median income for those with graduate or professional degrees living in the state was \$63,181.
- For those without a high school degree, with some college education or an associate's degree, with a bachelor's degree, or with a graduate or professional degree, the United States' median annual income was higher than for those living in Ohio with the corresponding level of education. High school graduates in Ohio who had not furthered their education had a higher median income (\$28,203) than the national median of \$28,043.

2015 Median Annual Earnings by Educational Attainment (population age 25 and over)

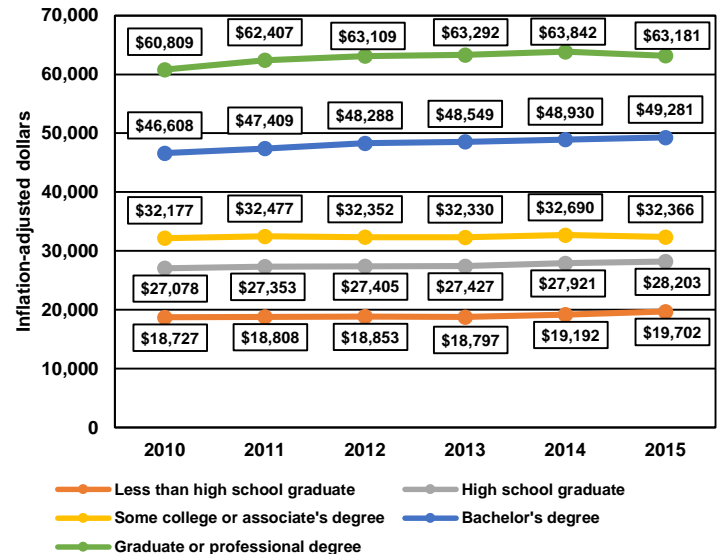


Source: U.S. Census Bureau, 2011-2015 5-yr ACS

Recent Earnings Trends

- Between 2010 and 2015, the median income for each level of educational attainment increased in Ohio. Those who held a bachelor's degree experienced the greatest change, as their median earnings increased by 5.7 percent.
- By contrast, Ohioans who have some college education or an associate's degree saw the smallest increase in median earnings (.6 percent).
- In 2015, the largest difference from one level of educational attainment to the next level in terms of median earnings was between those with some college education or an associate's degree and those with a bachelor's degree. The difference in median earnings was \$16,915 higher for college graduates.

Median Annual Earnings by Educational Attainment in Ohio (population age 25 and over)



Source: U.S. Census Bureau, 2011-2015 5-yr ACS

Unemployment and Educational Attainment

- Ohio's unemployment rate for those who had not graduated from high school is 17.27 percent in 2015. This compared to a national rate of 12.57 percent for the same group.
- The state's unemployment rate for those with a high school degree, some college education or an associate's degree are within one percentage point of the United States rate. However, Ohioans who earned a bachelor's degree or a more advanced degree had an unemployment rate of 2.97 percent, compared to 3.72 percent for those in the rest of the U.S.

Unemployment Rate by Educational Attainment in 2015 (population age 25 to 64 years)

Educational Attainment	Ohio Rate	U.S. Rate
Less than high school graduate	17.27%	12.57%
High school graduate	8.27%	8.88%
Some college or associate's degree	6.92%	6.99%
Bachelor's degree or higher	2.97%	3.72%

Source: U.S. Census Bureau, 2011-2015 5-yr ACS

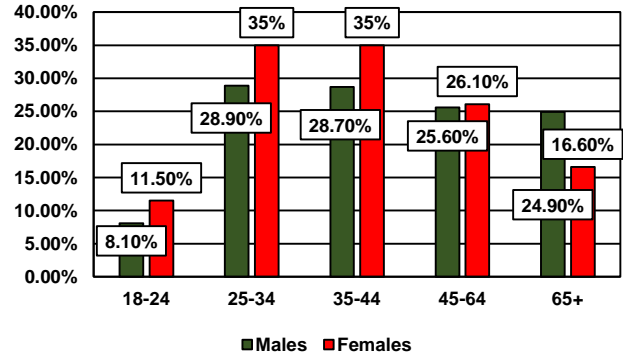
Educational Attainment: Age, Sex and Education



Age and Sex in 2015

- In every age group besides those 65 years and older, the percentage of female Ohioans with at least a bachelor's degree was larger than the percentage of male Ohioans. For the population that was 65 and older, 24.9 percent of men had a bachelor's degree or higher, while 16.6 percent of women had reached that level of education.
- 26.1 percent of the women aged 45-64 in Ohio held a bachelor's degree. This was compared to 25.6 percent of men aged 45-64. For state population aged 25-34 and 35-44, 35 percent of women had earned at least a bachelor's degree. In both age groups, men had achieved lower levels of educational attainment (28.9 percent and 28.7 percent respectively having earned at least a bachelor's degree).

Percentage of Ohioans with a Bachelor's Degree or Higher by Age and Sex in 2015

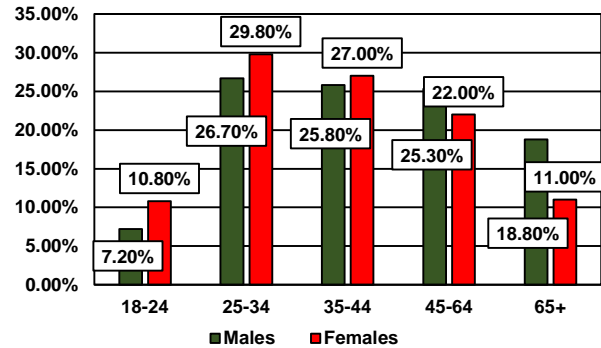


Source: U.S. Census Bureau, 2011-2015 5-yr ACS

Age and Sex in 2005

- In 2005, a lower percentage of Ohioans, both men and women in all age groups had received a bachelor's degree or a more advanced degree than in 2015. Also, in 2005, 25.3 percent of Ohio men 45-64 had earned at least a bachelor's degree. Only 22 percent of women the same age had reached that level of education that year.
- In 2005, a higher percentage of women ages 25-34 and ages 35-44 held a bachelor's degree or more than did men of the same age.

Percentage of Ohioans with a Bachelor's Degree or Higher by Sex and Age in 2005

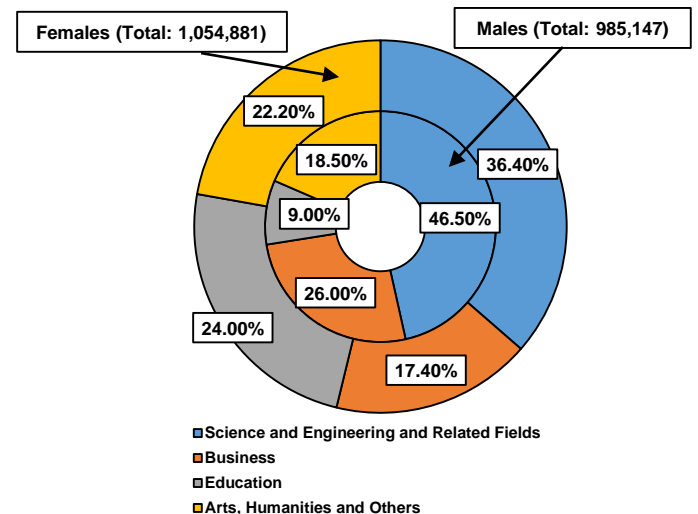


Source: U.S. Census Bureau, 2011-2015 5-yr ACS

Relationship between Sex and Field of Degree

- Of the 985,147 male bachelor's degree holders living in Ohio, 46.50 percent had majored in science, engineering or a related field. The second most popular majors were those that focused on the field of business. 26 percent of men had earned their degrees in business. The rest of the group had either focused their degrees on education (9 percent) or the arts, humanities and other fields (18.50 percent).
- 36.40 percent of Ohio women who held a bachelor's degree had focused their coursework on science, engineering or a related field. The second largest percentage of women had majored in education (24 percent). Business majors made up the smallest percentage of female bachelor's degree holders (17.40 percent), while the rest majored in the arts, humanities or other fields (22.2 percent).

Field of Bachelor's Degree by Sex (2015 population age 25 and over)



Source: U.S. Census Bureau, 2011-2015 5-yr ACS

Educational Attainment: Degrees and Certificates Conferred



Higher Education in Ohio

- Between 2007 and 2015, higher education students in Ohio have earned degrees from many institutions across the state. According to the Ohio Department of Higher Education, 29 community colleges, 83 private, not-for-profit institutions, 109 private, for-profit institutions, 15 public institutions and 19 satellite campuses conferred an assortment of degrees and certifications during the period.
- 151,678 degrees and certificates were awarded in 2015. 47.09 percent of these were given out to students from public universities who had attended main campuses. The second highest percentage of students came from private, not-for-profit institutions. 22.83 percent came from this background in 2015.
- The 2015 total of 151,678 of degrees and certificates conferred is a 1.63 percent increase from 2014. 149,234 degrees and certificates were awarded by Ohio's higher education institutions that year.

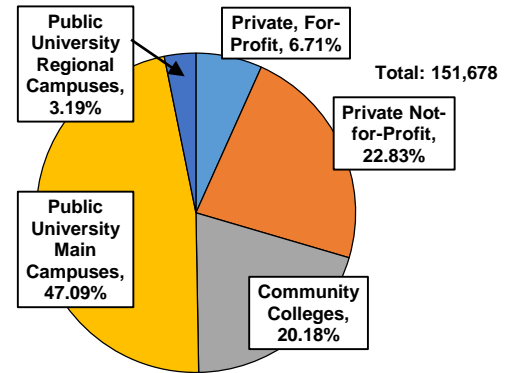
Institutions Conferring Bachelor's Degrees

- Ohio institutions awarded 69,589 bachelor's degrees in 2015. This is a 17.6 percent increase since 2007, when 59,175 were awarded. The majority of the degrees came from main campus universities, where 67.52 percent were awarded to those who graduated in 2015. 30.61 percent of the bachelor's degrees conferred in Ohio in 2015 came from private, not-for-profit institutions.

Fields of Specialization for New Graduates

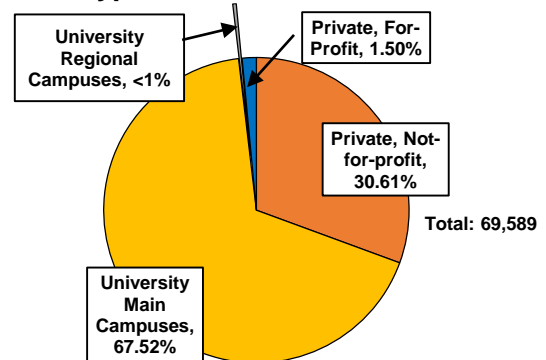
- 45.8 percent of degrees conferred in 2015 were bachelor's degrees. 52.09 percent of the 69,589 the students who graduated from an Ohio college with a bachelor's degree in 2015 had focused their studies on science, engineering or a related field. The second most popular majors were in the arts, humanities and other category. 22.26 percent of graduates chose a major in these fields.
- The rest of the students in Ohio who graduated in 2015 had either focused on the fields of business or education. 18.64 percent graduated with a business degree, while 7.01 percent graduated with a degree in education.

Percentage of Degrees and Certificates Coming from each Type of Institution



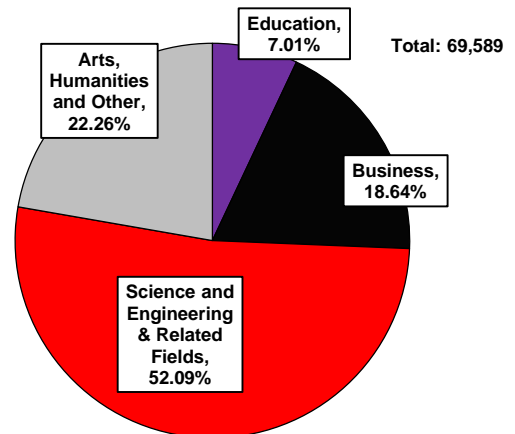
Source: Ohio Department of Higher Education, 2015

Percentage of Bachelor's Degrees Coming from each Type of Institution



Source: Ohio Department of Higher Education, 2015

Field of Majors for Bachelor's Degrees earned in 2015



Source: Ohio Department of Higher Education, 2015

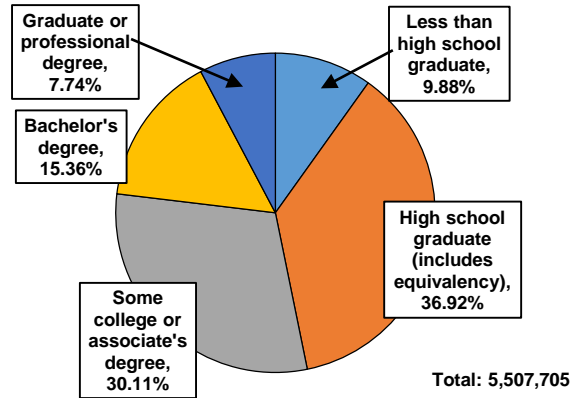
Educational Attainment: Graduates Living in Ohio



Education for Ohio-Born Current Residents

- According to the U.S. Census Bureau, 5,507,705 of Ohio's 2015 population age 25 and over were born in the state. The other 2,309,803 residents were born in another state, or born outside the country. In terms of educational attainment, the largest percentage of the 5.5 million born in Ohio were high school graduates, who had chosen not to further their education (36.92 percent).
- The second highest percentage of 2015 residents who were born in the state had either some college education or had earned an associate's degree. They made up 30.11 percent of the total group. 15.36 percent of Ohio-born residents had earned a bachelor's degree, while those who had earned a graduate or professional degree accounted for 7.74 percent of the group.

State Residents born in Ohio by Educational Attainment (population 25 and over)

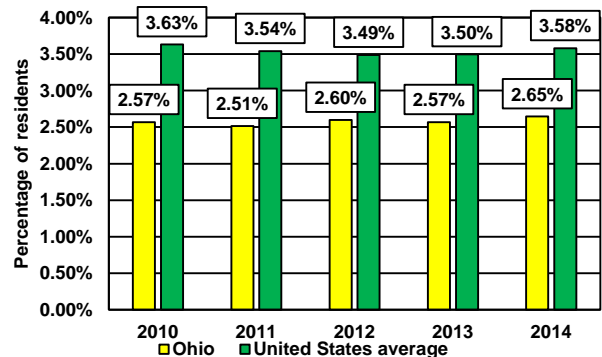


Movement and Retention of Graduates

- A 2015 Department of Higher Education report investigating the whereabouts of Ohio college graduates found that of the 44,606 students who earned degrees at some level in spring 2013, 79 percent were still working or attending a public college or university in Ohio in the fourth quarter of the year.
- The 2014 percentage of residents with an advanced degree who had moved to Ohio less than a year before (2.65 percent) was greater than the percentage in the previous four years. Between 2010 and 2014, the average percentage for Ohio was 2.58 percent. For the United States, the average percentage was 3.55 percent over the same period of time.

Source: U.S. Census Bureau, 2011-2015 5-yr ACS

Advanced degree holders* who moved to their state less than a year ago

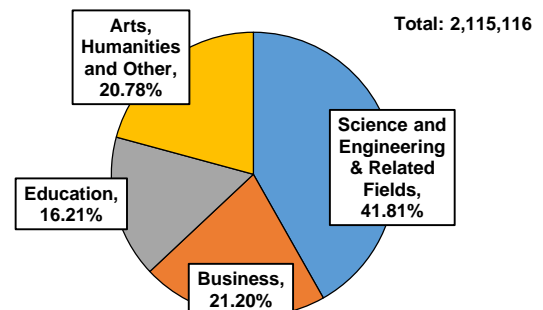


Source: Ohio Department of Higher Education, 2015

Degree Subject for Undergraduates Living in Ohio

- Of the over two million bachelor's degree holders in Ohio in 2015 age 25 and over, 41.81 percent majored in science and engineering or related fields. 21.20 percent majored in business, while 16.21 percent majored in education. The last 20.78 percent focused on the arts, the humanities or another field.
- The share of science and engineering or related fields majors in the United States is 44.09 percent, which is higher than Ohio's share. The state has a higher percentage of business majors than the rest of the United States, in which 20.51 percent of undergraduates are business majors. In addition, the share of education majors in Ohio is greater than the United States' 12.71 percent, while the percentage of arts, humanities and other majors is higher in the country as a whole (22.70 percent).

Field of Bachelor's Degree for Population of Graduates in Ohio (population age 25 and over)



Source: U.S. Census Bureau, 2011-2015 5-yr ACS

Educational Attainment: Money & Ohio's Education System



Public School Spending in Ohio

- According to the U.S. Census Bureau, between 2010 and 2014, the state of Ohio spent an annual average of \$19.36 billion on elementary and secondary public schools. This amounted to an annual average of \$11,191.80 per pupil over the time period.
- Public education spending increased approximately \$300 million (1.57 percent) between 2013 and 2014. Meanwhile, per pupil spending increased by \$206 or 1.85 percent between 2013 and 2014.
- \$11,354 was spent per pupil in Ohio elementary and secondary schools in 2014, which was the largest sum for the state since over the previous five years. Ohio spent \$11,223 per pupil in 2011, it spent \$11,204 in 2012 and then \$11,148 in 2013.

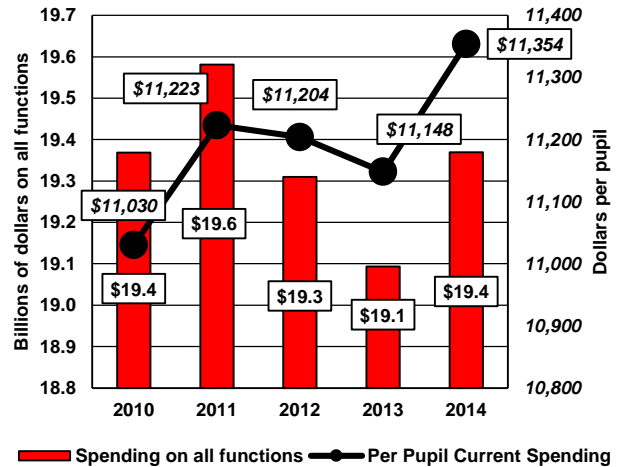
Public School Spending in Ohio

- According to a 2012 report released by the Ohio Board of Regents, the data collected to build the "State Support Per Student as a Percentage of Cost Per Student" table is a measure of the percentage of the cost of instruction that state support covers.
- In 2011, the state's contributions as a percentage of cost per student was 44.95 percent. This was a dip from the previous year, in which the state's share was 48.31 percent. In 2009 the share was 42.80 percent, and in 2008, the state's share was 41.11 percent.
- State support for students in public colleges decreased between 2002 and 2007, from 51.46 percent of cost per student to 40.38 percent.

Average Undergraduate Tuition at Ohio Schools

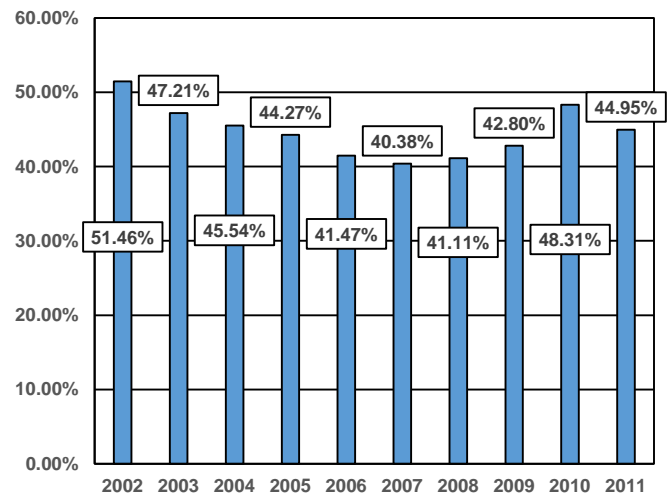
- According to a report from the Ohio Department of Education, in 2016, the average student from Ohio attending an Ohio public community college paid \$4,189 for tuition during the fiscal year. This is compared to students who attended regional campuses, who paid \$5,786. Main campus public university students paid the most on average (\$9,741) over the fiscal year.
- Tuition fees have increased since 2003. Average annualized tuition costs at Ohio community colleges have increased 56.3 percent between 2003 and 2016. Similarly, regional campus students have been charged 57.2 percent more over the time, while main campus students' annual tuition has increased 66.7 percent.

Ohio Public Elementary-Secondary Education Spending



Source: U.S. Census Bureau, 2016

State Support Per Student as a Percentage of Cost Per Student (Ohio Public Universities)



Source: Ohio Department of Higher Education, 2012

Average Annualized In-State Undergraduate Tuition and Fees (Ohio Public Universities)

School Sector	Tuition & fees	% change since 2003
Community Colleges	\$4,189	+56.2%
University Regional Campuses	\$5,786	+57.2%
University Main Campuses	\$9,741	+66.7%

Source: Ohio Department of Higher Education 2016

Educational Attainment: Innovation and Research from Public Universities

Ohio's public universities conduct research in a diverse variety of fields and foster innovative activity in their academic communities. These news stories showcase a small sample of this work.

[University of Akron](#)

- Scientists at the University of Akron found “that a nanometer-thin layer of water between two charged surfaces exhibits ice-like tendencies that allow it to withstand pressures of hundreds of atmospheres.” This discovery could lead to improved designs for a number of products, including biomedical knee implants and other situations in which “low friction surfaces are critically important.”

[Bowling Green State University](#)

- Dr. Shannon Pelini and her colleagues at BGSU have explored the effect of increased levels of carbon dioxide in an environment on the behavior of forest ant colonies. The research aims to provide a long-term look at the effects of global climate change.

[Case Western Reserve University](#) *

- Case Western Reserve University School of Medicine researchers have developed a non-invasive technique to harvest cells from human urine and grow them into clinically relevant stem cells that could be used to study Down syndrome and other neurologic conditions.

[Central State University](#)

- In February 2014, Central State was designated an 1890 land-grant university. Among other things, this designation provides the university with funding from the state and federal governments, which will, in part, be used for food science and agriculture-related research.

[University of Cincinnati](#)

- Researchers from the University of Cincinnati Gardner Neuroscience Institute helped author two studies that explored improvements that could be made in “defining, studying and treating Parkinson's disease.”

[Cleveland State University](#)

- Research from Cleveland State University in 2009 helped the State of California determine issues with the record systems of Premier Elections Solutions, which is a producer of optical-scan and touch-screen systems used in 33 states and half of Ohio's 88 counties.

[University of Dayton](#) *

- The University of Dayton Research Institute announced a project focusing on new materials used in automobile manufacturing. The aim is to identify ways to produce vinyl ester resins and carbon-fiber composites with longer shelf lives and at a lower cost.

[Kent State University](#)

- The Kent State University Board of Trustees recently voted to create the Brain Health Research Institute. The research field is among the largest at Kent State. The vote provided “new support for existing research programs at the university and (allowed) researchers to collaborate between departments, colleges and campuses.”

[Miami University \(Oxford\)](#)

- In July 2016, Miami University's Kennedy Research Group was awarded a patent for the use of a specific type of DNA aptamer to suppress carcinogenic activity and to increase human cancer cells' sensitivity to chemotherapy.

[Northeast Ohio Medical University](#)

- Through a collaboration with CEL-SCI Corporation, Northeast Ohio Medical University produced a new vaccine which prevents and treats breast cancer tumors.

[Ohio University](#)

- Ohio University is working on a research project studying the Nelsonville Bypass, which runs through the Wayne National Forest. The project is exploring the current status of and ways to improve both traffic safety and wild life preservation strategy.

[The Ohio State University](#)

- Researchers at The Ohio State University studied the way in which the human brain represents 3-D information. Their results helped gain a better understanding of the brain processes that occur as visual information is coded from flat to 3-dimensional.

[Shawnee State University](#)

- The University's Occupational Therapy Program began collecting data on the effects of walking backward and balance games on “center of pressure, fall risk, hamstring length and stride length in females 50 years or older.”

[University of Toledo](#)

- In collaboration with Theralase Technologies Incorporated, the University of Toledo has conducted “preclinical research into the safety and effectiveness of Theralase's Photo Dynamic Compounds in the destruction of bladder cancer in a rat model.”

[Wright State University](#)

- At the Wright State Research Institute, the team of researchers is working with the Air Force Research Laboratory on programs that are aiming to develop technology interfaces that allow one operator to control multiple Remotely Piloted Aircrafts.

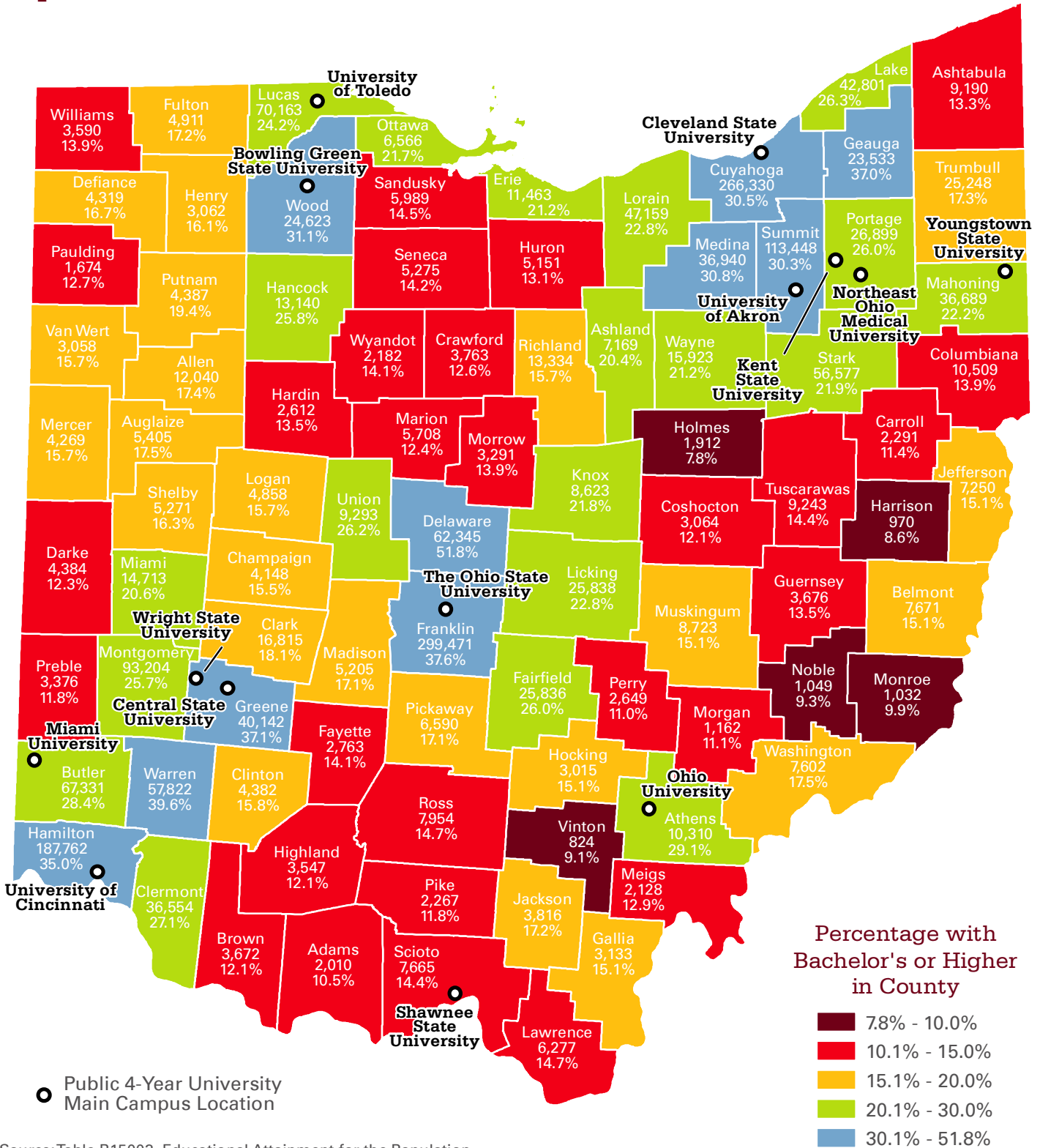
[Youngstown State University](#)

- Youngstown State University established five Centers of Excellence designed to “provide instruction and inquiry into specific academic areas,” and to improve the institution's research structure. These five include the Center of Excellence in Materials Science and Engineering, the Advanced Manufacturing Research Center, the Williamson College of Business Administration Center of Excellence in International Business, the Center for Sports Medicine and Applied Biomechanics and the Centofanti Center for Health and Welfare for Vulnerable Populations.

*Note – Although these two universities are not public institutions, they have received funding from the State of Ohio for research and development. Case Western Reserve University received ~\$5,519,000, while University of Dayton received ~\$8,943,000 from state and local governments (National Science Foundation, FY 2015)

Persons with a Bachelor's Degree or Higher

Number and Percentage for the Population 25 Years and Over



Source: Table B15003, Educational Attainment for the Population 25 Years and Over. 2011-2015 American Community Survey 5-Year Estimates. U.S. Census Bureau (from American FactFinder).

Prepared by: Ohio Development Services Agency, Office of Research (February 2017)

This map shows the number and percentage of the population 25 years and over with a bachelor's or higher (master's, professional, or doctorate) degree by county. Statewide, 2,040,028 persons (26.1%) 25 and over have a bachelor's or higher degree. Also shown are Ohio's 14 public 4-year university main campus locations.